

Construction Emissions Summary (lb/day)

	ROG	NO _x	PM ₁₀	PM _{2.5}
Phase 1: Grading				
Fugitive Dust	-	-	120.00	25.06
Off-Road Diesel Exhaust	4.62	37.73	2.03	1.87
Worker Trips	0.07	0.13	0.01	0.01
Subtotal Unmitigated	4.69	37.86	122.04	26.94
Phase 2: Paving				
Off-Gas Emissions	2.13	0.00	0.00	0.00
Off-Road Diesel Exhaust	2.78	16.39	1.40	1.29
On-Road Diesel Exhaust	0.46	7.36	0.32	0.28
Worker Trips	0.11	0.21	0.02	0.01
Subtotal Unmitigated	5.48	23.96	1.75	1.58
Phase 3: Building Construction				
Off-Road Diesel Exhaust	4.07	18.22	1.33	1.22
Vendor Trips	0.01	0.09	0.00	0.00
Worker Trips	2.98	5.84	0.65	0.35
Subtotal Unmitigated	7.06	24.15	1.99	1.57
Phase 4: Architectural Coatings				
Off-Gas Emissions	9.74	0.01	0.00	0.00
Worker Trips	0.01	0.00	0.00	0.00
Subtotal Unmitigated	9.74	0.01	0.00	0.00
Maximum Daily Emissions, Unmitigated	9.74	37.86	122.04	26.94
BCAQMD Significance Threshold	137	137	137	-

Land Use Parameters for Estimation of Construction Emissions in URBEMIS

<u>Land Use Types in URBEMIS</u>	<u>Acres</u>	<u>Notes</u>
Headquarters and Day Uses	9.0	New construction modeled in URBEMIS.
Campgrounds	30.0	New construction modeled in URBEMIS.
Restoration	150.0	Not included in URBEMIS Run.

Grading Parameters During Construction of New Park Headquarters and Campgrounds

Project Feature	Comperable Land Use Type Modeled in URBEMIS	Total Acres, Estimated	Acres to be Graded (assumed)
New Park Headquarters	Government civic center	9.00	9.00
Campgrounds	City Park	30.00	15.00
Total Acres to be Graded			24.00
Maximum % Graded Per Day			25%
Maximum Acres Graded Per Day			6.00

Operational CO₂ Emissions

	URBEMIS Emission Estimates		Annual Emissions (lb/year)	Annual Emissions (tons/year)
	Maximum Daily Summer Emissions (lb/day)	Maximum Daily Winter Emissions (lb/day)		
Area Sources	6,791.96	6,780.40	975,875	487.94
Campfires	6,539.51	6,539.51	940,055	470.03
Natural Gas	240.89	240.89	34,628	17.31
Landscaping	11.56	0.00	1,192	0.60
Architectural Coatings	0.00	0.00	0	0.00
Mobile Sources	9,614.84	8,589.49	1,340,478	670.24
Campground	8,145.86	7,277.11	1,135,674	567.84
Headquarters and Day Uses	1,468.98	1,312.38	204,804	102.40
Total	16,406.80	15,369.89	2,316,353	1,158.18

pounds per ton 2,000

Assumed Usage Levels of the Park (for seasonal weighting)

According to estimate provided by Denise Reichenberg of Cal State Parks in an e-mail to Suzanne Enslow of EDAW on Nov. 20, 2007, park operations are projected to operate at varying capacities throughout the year:

Projections of California State Parks Staff

days/year	% capacity	summer/winter
75	100	summer
75	75	half and half
50	25	winter

Adjusted Projections for Summer/Winter Split

days/year	% capacity	summer/winter
75	100	summer
37.5	75	summer
37.5	75	winter
50	25	winter

Summary of Summer/Winter Split

Operation-days per year	operation-days/year
summer	103.125
winter	40.625
total	143.75

An "operation-day" is equivalent to the park operating a full capacity (e.g., full campground) for one day.

Maximum Daily Operational Emissions of Criteria Air Pollutants (lb/day)

	ROG	NO _x	PM ₁₀	PM _{2.5}
Area Sources	441.58	5.26	66.57	64.07
Campfires	440.46	5.00	66.55	64.05
Natural Gas	0.01	0.19	0.00	0.00
Landscaping	0.97	0.07	0.02	0.02
Architectural Coatings	0.14	0.00	0.00	0.00
Mobile Sources	12.84	16.74	16.02	3.09
Campground	10.68	14.01	13.57	2.62
Headquarters and Day Uses	2.16	2.73	2.45	0.47
Total	454.42	22.00	82.59	67.16
BCAQMD's Level B Threshold	25	25	80	-
BCAQMD's Level C Threshold	137	137	137	-

Notes

All estimates were modeled using URBEMIS v.9.2.2.

The emissions of area sources presented are the maximum of daily emissions for summer or winter.

The summer estimates of mobile-source emissions are used from URBEMIS because that is when the greatest levels of use of the campground and day-uses are expected.

Summary of Maximum Daily Trips

	Passenger Vehicles					Other Vehicle Types			Total
	Light Auto	Light Truck <3,750 lb	Light Truck 3,751-5,750 lb	Med Truck 5,751-8,500 lb	Motorcycle	RV	School Bus	Garbage Truck	
Campgrounds	204	45	90	40	15	74	-	-	468
Headquarters and Day Uses	80	18	35	15	6	50	4	2	210
Total	284	63	126	55	20	124	4	2	678

Percentage of Total Fleet Mix

41.9% 9.3% 18.5% 8.1% 3.0% 18.3% 0.6% 0.3% 100.0%

Notes

Garbage collection vehicles are assumed to be a "heavy-heavy truck" weighing 33,001-60,000 lbs.

The fleet mix percentage for all other vehicle types in URBEMIS should be 0.0%, including the following vehicle types:

Lite-Heavy Truck 10,001-14,000 lbs.

Med-Heavy Truck 14,001-33,000 lbs.

Other Bus

Urban Bus

Trip Type

100% of trips are considered primary trips.

Trip Lengths

Rural Trip lengths are selected.

100% of the residential trips are assumed to be home-based work trips because they have the greatest rural trip length of 16.8 miles.

This trip distance is assumed to be reasonable because the site is 6.0 miles from Chico, which is the closest population center.

The default trip lengths were used for the commercial-based trips (i.e., for the headquarters and day uses).

Road Dust

100% of trip travel would occur on paved roads.

According to the project description, new roadways and lots in the park would be paved with asphalt, concrete, or aggregate based course.

Passenger Vehicle Fleet Breakdown

It is assumed that, among the passenger cars, the fleet will consist of the following four vehicle types in the save relative proportion of the URBEMIS default values.

	Light Auto	Light Truck <3,750 lb.	Light Truck 3,751-5,750 lb.	Med Truck 5,751-8,500 lb.	Motorcycle	Total
URBEMIS Default Fleet Distribution	49.0	10.9	21.7	9.5	3.5	94.6
% relative to Pass. Car Total	51.8%	11.5%	22.9%	10.0%	3.7%	100.0%

Trips Generated by Campground Visitors

Campgrounds	Camp/RV Sites	Parking Spaces			Estimated Daily Trip Rate (per camp site parking place by vehicle type)			Maximum Daily Trips		
		Pass.	RV	Total	Pass.	RV	Total	Pass.	RV	Total
		Veh.			Veh.			Veh.		
RV Campground	25	0	25	25	2.0	2.0	4.0	50	50	100
Vehicle Campground	15	15	0	15	4.0	0.0	4.0	60	0	60
Walk-in Tent Campground	10	30	0	30	4.0	0.0	4.0	120	0	120
Group Campground	35	35	12	47	4.0	2.0	4.0	164	24	188
Total	85	80	37	117				394	74	468

Notes/Assumptions

Campground Trip Generation Rates

The daily trip rates for camp sites were estimated based on the number of parking spaces at the campgrounds. Campers make one trip when arriving to the site, one trip when departing, and one round-trip during each day of their stay, and that the length of each stay is one night. This estimate is considered to be conservative compared to the limited trip rate estimates in the Institute of Transportation Engineers' *Trip Generation* manual, 7th Edition (2003). The ITE manual estimates that the weekday trip rate for a Campground/Recreational Vehicle Park is 0.20 trips per occupied camp site during the morning peak hour and 0.37 trips per occupied camp site during the afternoon peak hour. Applying a K-factor of 10 to the higher This estimate is also considered to be conservative because many campers stay at a camp site for multiple nights and, therefore, their arrival and departure trips would not occur every day.

Fleet Mix Assumptions

RV sites generate 2.0 trips per day in RVs and 2.0 trips per day in passenger vehicles; and that other campsites generate 4.0 trips per day in passenger vehicles. One additional garbage truck would serve the park each day, resulting in 2 daily trips. None of the visitor-related trips would occur in buses or trucks greater than 8,500 lb.

Fleet Mix of Campground Trips

	Light Auto	Light Truck <3,750 lb	Light Truck 3,751-5,750 lb	Med Truck 5,751-8,500 lb	Motorcycle	RV	Total
Maximum Daily Trips	204	45	90	40	15	74	468
Percentage of Camp Ground Fleet Mix	43.6%	9.7%	19.3%	8.5%	3.1%	15.8%	100.0%

Trip Generation Rate

Proxy Land Use in URBEMIS	mobile home	Alt. city park
Acres (approx.)	30.0	30
Trip Rate Unit Type	dwelling unit	acres
Units	85	30
Maximum Daily Vehicle Trips	468	468
Trip Rate	5.51	15.60

Trips Generated by New Headquarters and Day Uses

	Parking Spaces (additional)				Estimated Daily Trip Rate (per parking place by vehicle type)				Maximum Daily Trips					Fleet Mix of Trips Generated by Headquarters, Day Uses, and Garbage Collection									
	Pass. Veh.	RV	School Bus	Total	Pass. Veh.	RV	School Bus	Total	Pass. Veh.	RV	School Bus	e Truck	Total		Light Auto	Light Truck <3,750 lb	Light Truck 3,751-5,750 lb	Med Truck 5,751-8,500 lb	Motorcycle	RV	School Bus	Garbage Truck	Total
New Park HQ and Amphitheatre	15	10	1	26	10.0	5.0	4.0	-	150	50	4	0	204	Maximum Daily Trips	80	18	35	15	6	50	4	2	210
Additional Employee (funding permitted)	1	0	0	1	4.0			-	4	0	0	0	4	Percentage of HQ Fleet Mix	38.0%	8.4%	16.8%	7.4%	2.7%	23.8%	1.9%	1.0%	100.0%
Garbage Collection												2	2										
Totals	16	10	1	27					154	50	4	2	210										

Notes/Assumptions

Headquarters/Day Uses Trip Generation Rates

The daily turnover rate would be 5.0 for the passenger vehicle parking spaces and 2.5 for the RV parking spaces. Thus, the daily trip rates for passenger vehicles and RVs would be 10.0 and 5.0, respectfully.
The Amphitheatre would drawl up to two school buses per day, resulting in 4.0 daily trips.
Two school buses would visit the amphitheatre and environmental education area each day resulting in 4.0 daily trips.

Garbage Collection

In addition, the expanded park is expected to generate 2 additional trips per day by a garbage truck to collect refuse at the campgrounds and headquarters.
Garbage collection vehicles are assumed to be a "heavy-heavy truck" weighing 33,001-60,000 lbs.

Redevelopment of Existing Headquarters

Development of the existing headquarters, located west of the river, to a day-use facility was analyzed in the EIR for the BSRSP General Plan (State Parks 2003); therefore, it is not included as part of this project.

Modification of Existing Park Facilities

Modification and maintenance of existing Park facilities was analyzed in the EIR for the BSRSP Preliminary General Plan (State Parks 2003); therefore, modification of the existing day-use area south of the existing headquarters is not included as part of this project.

Trip Generation Rate

Proxy Land Use in URBEMIS [governmnet \(civic center\)](#)
Acres (approx.) [9.0](#)
Trip Rate Unit Type 1,000 sq. ft.
Units [10](#)

Maximum Daily Veh Trips 210
Trip Rate [21.00](#)

Worker Commute Trip % [1.9%](#)

Operation Parameters for Campfires

Number of Fire Rings

<u>Campground</u>	<u>#</u>	<u>notes/source</u>
RV Campground	25	One fire ring per campsites, as described in the project description.
Vehicle Campground	15	One fire ring per campsites, as described in the project description.
Walk-in Tent Campground	10	One fire ring per campsites, as described in the project description.
Group Campground	5	Assuming one fire ring at each of the 4 group picnic shelters plus the group fire ring.
Total Fire Rings	55	summation
Number of residential units	85	equivalent to total number of camp sites
Percentage of residential units with fire rings	64.7%	calculation
Percentage of residential units without fire rings	35.3%	calculation

Operation Parameters

	<u>value</u>	<u>units</u>	<u>notes/source</u>
Number of campfire rings	55	fire rings	project description
Length of camping season	35	weeks/year	estimation, roughly 8 months of a year from March through October
Occupancy rate of camp site	5	days/week	assumption, conservative
Campfires per day per fire ring	1	campfires/day/ring	assumption
Campfires per year	9,625	campfires/year	calculation
Maximum Campfires per day	55	campfires/day	calculation, assumes campground is fully occupied
Avg. campfire size	70	lb	assumption, conservatively high
Mass of wood burned per year	673,750	lb/year	calculation
Maximum mass of wood burned per day	3,850	lb/day	calculation
pounds per ton	2,000	lb/ton	conversion rate
Mass of wood burned per year	337	ton/year	conversion calculation
Maximum mass of wood burned per day	1.93	ton/day	conversion calculation
pounds per cord	2,458	lb/cord	default conversion rate in URBEMIS 2007
Volume of wood burned per year	274.10	cords/year	conversion calculation
Maximum volume of wood burned per day	1.57	cords/day	conversion calculation
Campfire usage	175	days/yr/campfire	
Wood burned per year per fire ring	4.98	cords/yr/campfire	

Architectural Coatings Parameters

The Residential % Surface Area Repainted Each Year is estimated based on the number of restroom structures at the campgrounds, instead of the number of camp sites.

<u>Campgrounds</u>	<u>Number of Restroom Facilities</u>		
RV Campground	2	Number of campsites	85
Vehicle Campground	2	Percent of campsites with structure (ratio restrooms:campsites)	7.1%
Walk-in Tent Campground	0	URBEMIS Default Residential % Surface Area Repainted Each Year	10.0%
Group Campground	2	Actual Residential % Surface Area Repainted Each Year	0.7%
Total	6		

The URBEMIS default value of 10.0% is used for the Nonresidential % Surface Area Repainted Each Year.

Natural Gas Parameters

	<u>Percent Using Natural Gas</u>	<u>Assumption</u>
Residential	7.1%	The restroom facilities in the campgrounds will have natural gas water heaters.
NonResidential	100.0%	The HQ facility will have a natural gas supply.

Landscaping

Length of Summer (days) 240

It is assumed that some landscaping activities would occur March through October, which is approx. 240 days of the year.

	Singh	Nicolaus	Total
Parcel size (acres)	43	146	189
Facilities Footprint (acres)	0	21	21

	acres	
total restored habitat	150	The proposed project would add approximately 150 acres of restored riparian habitat

All the campgrounds and the new park headquarters would be located on the Nicolaus property.

Urbemis 2007 Version 9.2.2

Detail Report for Summer Area Source Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\Singh&Nicolaus.urb9

Project Name: Singh and Nicolaus Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.19	0.11	0.00	0.00	0.00	240.89
Hearth - No Summer Emissions							
Landscape	0.97	0.07	7.15	0.00	0.02	0.02	11.56
Consumer Products	4.16						
Architectural Coatings	0.14						
TOTALS (lbs/day, unmitigated)	5.28	0.26	7.26	0.00	0.02	0.02	252.45

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 7.1%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 64.7%

Percentage of residences with natural gas fireplaces changed from 55% to 0%

Cords of wood burned per year per wood fireplace changed from 0.28 cords per year to 4.98 cords per year

Days used per year per wood stove changed from 82 days to 175 days

Length of summer period for landscape equipment changed from 180 days to 240 days

The residential percentage of surface area repainted each year changed from 10% to 0.7%

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Urbemis 2007 Version 9.2.2

Detail Report for Winter Area Source Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\Singh&Nicolaus.urb9

Project Name: Singh and Nicolaus Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.19	0.11	0.00	0.00	0.00	240.89
Hearth	440.46	5.00	485.85	0.77	66.55	64.05	6,539.51
Landscaping - No Winter							
Consumer Products	4.16						
Architectural Coatings	0.14						
TOTALS (lbs/day, unmitigated)	444.77	5.19	485.96	0.77	66.55	64.05	6,780.40

Area Source Changes to Defaults

Percent residential using natural gas changed from 60% to 7.1%

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 64.7%

Percentage of residences with natural gas fireplaces changed from 55% to 0%

Cords of wood burned per year per wood fireplace changed from 0.28 cords per year to 4.98 cords per year

Days used per year per wood stove changed from 82 days to 175 days

Length of summer period for landscape equipment changed from 180 days to 240 days

The residential percentage of surface area repainted each year changed from 10% to 0.7%

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Urbemis 2007 Version 9.2.2

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\S&N_Construction.urb9

Project Name: Singh and Nicolaus Construction

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	<u>ROG</u>	<u>NOx</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5 Total</u>
Time Slice 3/3/2008-3/14/2008 Active	4.69	37.86	120.01	2.03	122.04	25.06	1.87	26.94
Fine Grading 03/01/2008-03/15/2008	4.69	37.86	120.01	2.03	122.04	25.06	1.87	26.94
Fine Grading Dust	0.00	0.00	120.00	0.00	120.00	25.06	0.00	25.06
Fine Grading Off Road Diesel	4.62	37.73	0.00	2.03	2.03	0.00	1.87	1.87
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.13	0.01	0.01	0.01	0.00	0.00	0.01
Time Slice 3/17/2008-3/31/2008 Active	5.48	23.96	0.05	1.70	1.75	0.02	1.57	1.58
Asphalt 03/16/2008-03/31/2008	5.48	23.96	0.05	1.70	1.75	0.02	1.57	1.58
Paving Off-Gas	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.78	16.39	0.00	1.40	1.40	0.00	1.29	1.29
Paving On Road Diesel	0.46	7.36	0.03	0.29	0.32	0.01	0.27	0.28
Paving Worker Trips	0.11	0.21	0.02	0.01	0.02	0.01	0.01	0.01
Time Slice 4/1/2008-4/30/2008 Active	7.06	24.15	0.43	1.56	1.99	0.16	1.42	1.57
Building 04/01/2008-04/30/2008	7.06	24.15	0.43	1.56	1.99	0.16	1.42	1.57
Building Off Road Diesel	4.07	18.22	0.00	1.33	1.33	0.00	1.22	1.22
Building Vendor Trips	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	2.98	5.84	0.43	0.22	0.65	0.16	0.19	0.35
Time Slice 5/1/2008-5/30/2008 Active	9.74	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Coating 05/01/2008-05/31/2008	9.74	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	9.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00

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Phase Assumptions

Phase: Fine Grading 3/1/2008 - 3/15/2008 - grading

Total Acres Disturbed: 24

Maximum Daily Acreage Disturbed: 6

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 3/16/2008 - 3/31/2008 - Paving of campground roads and HQ parking lot

Acres to be Paved: 9.75

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 4/1/2008 - 4/30/2008 - Construction of campground facilities and rehab of new Park HQ

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 5/1/2008 - 5/31/2008 - Architectural coatings of new HQ and campground bathrooms

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\Singh&Nicolaus.urb9

Project Name: Singh and Nicolaus Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Mobile home park	10.68	14.01	154.47	0.08	13.57	2.62	8,145.86
Government (civic center)	2.16	2.73	28.79	0.01	2.45	0.47	1,468.98
TOTALS (lbs/day, unmitigated)	12.84	16.74	183.26	0.09	16.02	3.09	9,614.84

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2009 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Mobile home park	30.00	5.51	dwelling units	85.00	468.35	7,868.28
Government (civic center)		21.00	1000 sq ft	10.00	210.00	1,418.32
					678.35	9,286.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.9	1.6	98.0	0.4
Light Truck < 3750 lbs	9.3	3.7	90.8	5.5
Light Truck 3751-5750 lbs	18.5	0.9	98.6	0.5
Med Truck 5751-8500 lbs	8.1	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	75.0	25.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	3.0	71.4	28.6	0.0
School Bus	0.6	0.0	0.0	100.0
Motor Home	18.3	10.0	80.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	100.0	0.0	0.0			
% of Trips - Commercial (by land use)						
Government (civic center)				1.9	1.0	97.2

Operational Changes to Defaults

The urban/rural selection has been changed from Urban to Rural

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\Singh&Nicolaus.urb9

Project Name: Singh and Nicolaus Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	5.28	0.26	7.26	0.00	0.02	0.02	252.45

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	12.84	16.74	183.26	0.09	16.02	3.09	9,614.84

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18.12	17.00	190.52	0.09	16.04	3.11	9,867.29

Urbemis 2007 Version 9.2.2

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sacramento\Application Data\Urbemis\Version9a\Projects\Singh & Nicolaus\Singh&Nicolaus.urb9

Project Name: Singh and Nicolaus Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	444.77	5.19	485.96	0.77	66.55	64.05	6,780.40

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	15.15	25.25	206.15	0.08	16.02	3.09	8,589.49

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	459.92	30.44	692.11	0.85	82.57	67.14	15,369.89